**Assessment Recommendations for**

**EngageNY/Eureka Math *A Story of Units***

**Fourth Grade – Module 3**

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| Table of Contents | |
| Module Assessment Overview | page 2 |
| Grade 4 Standards Checklist | page 3 |
| Module 3 Mid-Module Assessment Task… |  |
| Score Sheet | pages 4-5 |
| Rubric | pages 6-7 |
| Key | pages 8-11 |
| Module 3 End-of-Module Assessment Task… |  |
| Score Sheet | pages 12-13 |
| Rubric | pages 14-15 |
| Key | pages 16-19 |

**Module Assessment Overview**

**Purpose of Assessments**

**Mid-Module Assessment:** These tasks address approximately the **first half** of the module’s learning objectives, and provide important information for instruction and for grading.

**End-of-Module Assessment:** These tasks are based on all standards addressed in order to gauge students’ full range of understanding of the **module as a whole**. The End-of-Module assessment should carry more weight than the Mid-Module Assessment in terms of student grades in the appropriate domain.

**Administration of Assessments**

* Mid- and End-of-Module Assessments are designed to be completed in approximately one class period. However, The tests can be given over multiple days as needed.
* Assessments are designed to be completed independently by students, without assistance.
* These tasks should not be preceded by review of similar problems.

**Grading Guidance**

***The points assigned to each step in the progression of learning on the rubrics have been changed.*** EngageNY’s 1-4 step/point scale, in which Step 4 denotes proficiency with grade level standards, may be confused with Bethel’s 1-4 standards-based grading system. To alleviate confusion, Bethel’s cover sheets and rubrics will use a 0-3 point scale with 3 points denoting proficiency at grade level standards.

**General Grading Guidance:**

* On the report card, student learning is reported by CCSS domain. The Fourth Grade CCSS domains are: Operations and Algebraic Thinking, Number and Operations in Base Ten, Number and Operations – Fractions, Measurement and Data, and Geometry.
* Grades in each domain should be based on multiple sources of evidence, including the Mid- and End-of-Module Assessments. The End-of-Module assessment should carry more weight than the Mid-Module Assessment in terms of student grades in the appropriate domain.

**Module 3 Grading Guidance:**

* *Standards 4.OA.1, 4.OA.2, and 4.OA.3 will be assessed again in Module 7. The remaining standards taught and assessed in this module will not be assessed again.*

**Updates**

After feedback on Assessments in Module 1, **changes were made to the rubrics** for the Mid- and End-of-ModuleAssessments. The intent of the changes was to maintain the definition of the score of 3 as meeting standard, but ensure that perfection is not the only definition of a 3.

* Rubrics in this Assessment Packet for Module 3 are also modified from the original EngageNY rubrics to reflect the above information.

We recommend examining the End-of-Module Assessment as the Module is being planned. This allows for better alignment between lessons and the assessment.

**Grade 4 Common Core State Standards Checklist by Module**

This grade-level chart provides an at-a-glance view of when each standard is addressed. **Shaded boxes indicate standards first assessed in Module 3.** *Note that standards included in major clusters are followed by an asterisk (\*)*. Please refer to the Curriculum Overview of *A Story of Units* for a curriculum map and detailed grade-level descriptions including a summary of the year, a rationale of the module sequence, and a standards alignment chart.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CCSS | | GRADE 4 MODULES | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4.OA | 1\* |  |  | X |  |  |  | X |
| 2\* |  |  | X |  |  |  | X |
| 3\* | X |  | X |  |  |  | X |
| 4 |  |  | X |  |  |  |  |
| 5 | -- | -- | -- | -- | -- | -- | -- |
| 4.NBT | 1\* | X |  |  |  |  |  |  |
| 2\* | X |  |  |  |  |  |  |
| 3\* | X |  |  |  |  |  |  |
| 4\* | X |  |  |  |  |  |  |
| 5\* |  |  | X |  |  |  | X |
| 6\* |  |  | X |  |  |  |  |
| 4.NF | 1\* |  |  |  |  | X |  |  |
| 2\* |  |  |  |  | X |  |  |
| 3a\* |  |  |  |  | X |  |  |
| 3b\* |  |  |  |  | X |  |  |
| 3c\* |  |  |  |  | X |  |  |
| 3d\* |  |  |  |  | X |  |  |
| 4a\* |  |  |  |  | X |  |  |
| 4b\* |  |  |  |  | X |  |  |
| 4c\* |  |  |  |  | X |  |  |
| 5\* |  |  |  |  |  | X |  |
| 6\* |  |  |  |  |  | X |  |
| 7\* |  |  |  |  |  | X |  |
| 4.MD | 1 |  | X |  |  |  |  | X |
| 2 |  | X |  |  | X | X | X |
| 3 |  |  | X |  |  |  |  |
| 4 |  |  |  |  | X |  |  |
| 5a |  |  |  | X |  |  |  |
| 5b |  |  |  | X |  |  |  |
| 6 |  |  |  | X |  |  |  |
| 7 |  |  |  | X |  |  |  |
| 4.G | 1 |  |  |  | X |  |  |  |
| 2 |  |  |  | X |  |  |  |
| 3 |  |  |  | X |  |  |  |

**Grade 4 Module 3 Mid-Module Assessment Task Score Sheet**

A Progression of Learning

A Progression of Learning is provided to describe steps that illuminate the gradually increasing understandings that students develop *on their way to proficiency.* In this chart, this progress is presented from left to right.  The learning goal for each student is to move to the last step, “Evidence of solid reasoning with a correct answer”.  These steps are meant to help teachers and students identify and celebrate what the student CAN do now, and what they need to work on next.

| Score Key: A Progression of Learning | | | |
| --- | --- | --- | --- |
| Little evidence of reasoning without a correct answer.  (0 Points) | Evidence of some reasoning without a correct answer.  (1 Point) | Evidence of some reasoning with a correct answer or evidence of solid reasoning with an incorrect answer.  (2 Points) | Evidence of solid reasoning with a correct answer.  (3 Points) |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Module 3: Mid-Module Assessment** | | | | | | | | | | | |
|  | **Domain** | | | | **Standards** | | | | | | | |
| Question | Operations and Algebraic Thinking | Number and Operations in Base Ten | | Measurement and Data | 4.OA.1 | | 4.OA.2 | 4.OA.3 | | 4.NBT.5 | | 4.MD.3 |
| 1 |  | 0 1 2 3 | |  |  | |  |  | | X | |  |
| 2 |  | 0 1 2 3 | |  |  | |  |  | | X | |  |
| 3 | 0 1 2 3 |  | |  | X | | X | X | |  | |  |
| 4 | 0 1 2 3 |  | |  | X | |  | X | |  | |  |
| 5 a, b, c |  |  | | 0 1 2 3 |  | |  |  | |  | | X |
| 5 a, d | 0 1 2 3 |  | |  | X | | X | X | |  | |  |
|  | | |  | |  |  | |  | | |
| Domain  Score | Number and Operations in Base-Ten | Number and Operations in Base Ten | | Measurement and Data |  | | | |
| Level |  |  | |  |
| Level 3 | 8-9 points | 5-6 points | | 3 points |
| Level 2 | 5-7 points | 3-4 points | | 2 points |
| Level 1 | 0-4 points | 0-2 points | | 0-1 points |

Note: For more information about standards assessed in this module, see back of this score sheet.

Notes:

**Grade 4 Module 3 Mid-Module Assessment Task Score Sheet (continued)**

|  |
| --- |
| Mid-Module Assessment Task (Topics A-D)  Clusters and Standards Addressed |
| Use the four operations with whole numbers to solve problems.  4.OA.1 Interpret a multiplication equation as a comparison, e.g., interpret 35 = 5 x 7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.  4.OA.2 Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.  4.OA.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.  **Use place value understanding and properties of operations to perform multi-digit arithmetic.**  4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.  Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.  4.MD.3 Apply the area and perimeter formulas for rectangles in real world and mathematical problems. *For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.* |

**Grade 4 Module 3 Mid-Module Assessment Task Rubric**

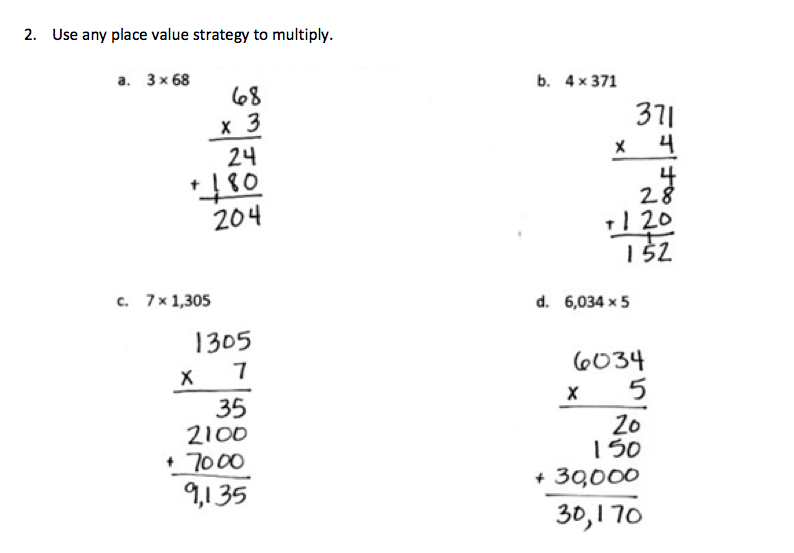
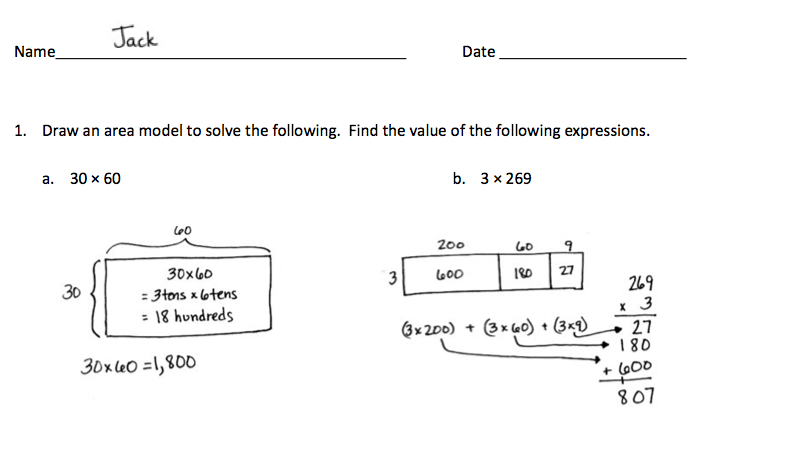
**\* Indicates items that have rubrics with changes/modifications from the original EngageNY rubric.**

| A Progression of Learning | | | | | |
| --- | --- | --- | --- | --- | --- |
| Assessment  Task Item | STEP 0  Little evidence of reasoning without a correct answer.  (0 Points) | STEP 1  Evidence of some reasoning without a correct answer.  (1 Point) | | STEP 2  Evidence of some reasoning with a correct answer or evidence of solid reasoning with an incorrect answer.  (2 Points) | STEP 3  Evidence of solid reasoning with a correct answer.  (3 Points) |
| **1 \***  4.NBT.5 | The student correctly completes **0** of the four parts. | The student correctly completes **1** of the four parts. | | The student correctly completes **2** of the four parts. | The student correctly completes **3-4** of the four parts. (See below.) |
| **a. (1)** area model **(2)** 1,800 b. **(3)** area model **(4)** 807 | | | | |
| **2 \***  4.NBT.5 | The student is unable to solve any problem correctly. | The student correctly solves **1** of the parts. | | The student correctly solves **2** of the parts. | Student correctly answers **3-4** of the four parts. (See below.) |
| **a. (1)** 204 **b. (2)** 1,484 **c. (3)** 9,135 **d. (4)** 30,170  Shows all work using area models, partial products, or the general method. | | | | |
| **3**  4.OA.1  4.OA.2  4.OA.3 | The student answers **0** of the three parts. | The student answers **1** of the three parts. | | The student answers **2** of the three parts. | The student answers **3** of the three parts. (See below.) |
| **(1)** uses an equation or model to solve  **(2)** Shows work  **(3)** answers 648 seats in an answer statement | | | | |
| **4 \***  4.NBT.5  4.OA.1  4.OA.3 | The student answers incorrectly and provides little or no evidence of reasoning through estimation. | The student correctly answers **1** of the parts. | The student correctly answers **2** of the parts. | | The student correctly answers **3-4** of the four parts. (See below.) |
| **(1)** uses an equation or model to solve  **(2)** shows work  **(3)** answers 1,092 boxes in an answer statement  **(4)** validates answer is reasonable through estimation. | | | | |

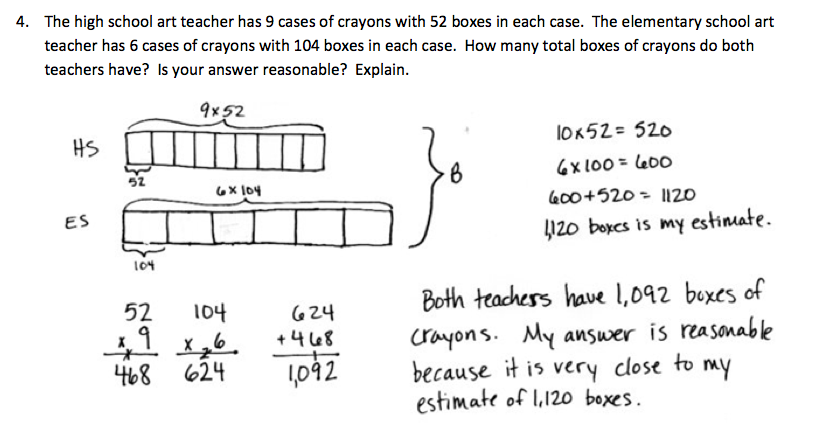
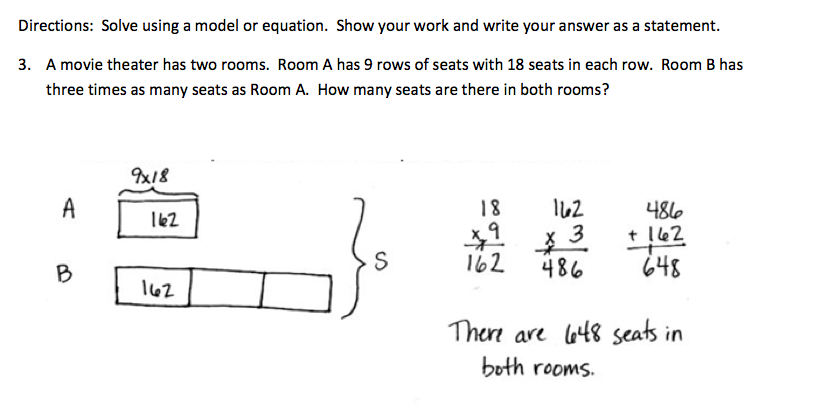
**Grade 4 Module 3 Mid-Module Assessment Task Rubric (continued)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Assessment  Task Item** | STEP 0  Little evidence of reasoning without a correct answer.  **(0 Points)** | STEP 1  Evidence of some reasoning without a correct answer.  **(1 Point)** | STEP 2  Evidence of some reasoning with a correct answer or evidence of solid reasoning with an incorrect answer.  **(2 Points)** | STEP 3  Evidence of solid reasoning with a correct answer.  **(3 Points)** |
| **5a, b, c \***  4.MD.3  Part a will be scored in both MD and OA. | The student correctly answers **0** of the three parts. | The student correctly answers **1** of the three parts. | The student correctly answers **2** of the three parts. | The student correctly answers **3** of the three parts. (See below.) |
| **a. (1)** 5 m × 4 m = 20 square meters  **b. (2)** 120 square meters  **c. (3)** 26 meters | | | |
| 5a, d \*  4.OA.1  4.OA.2  4.OA.3 | The student correctly answers **0** of the three parts. | The student correctly answers **1** of the three parts. | The student correctly answers **2** of the three parts. | The student correctly answers **3-4** of the four parts. (See below.) |
| **a. (1)** draws a rectangle for last year’s garden; labels the width as 10 meters and length as 12 meters.  **d. (2)** writes multiplication equation  **(3)** 208 plants;  **(4)** reasons correctly through estimation. | | | |

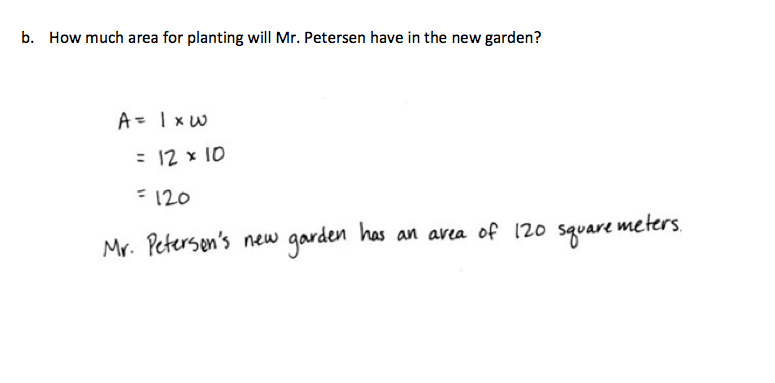
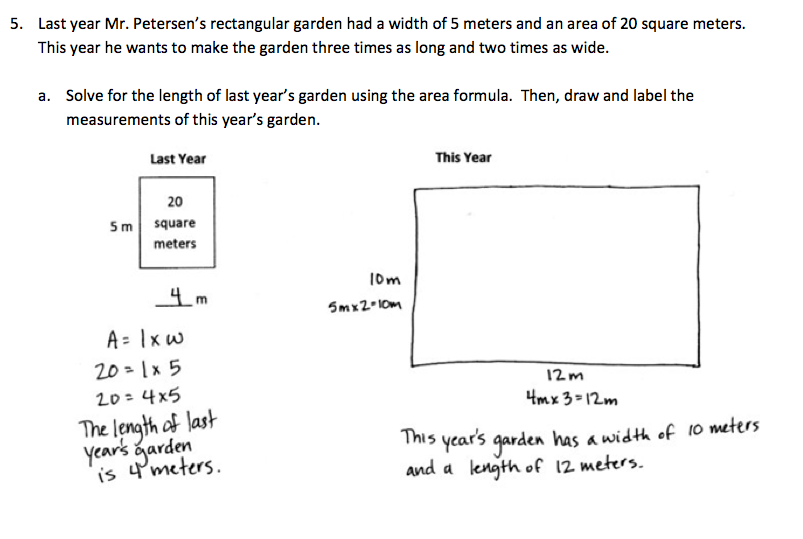
**Grade 4 Module 3 Mid-Module Assessment Task Key**



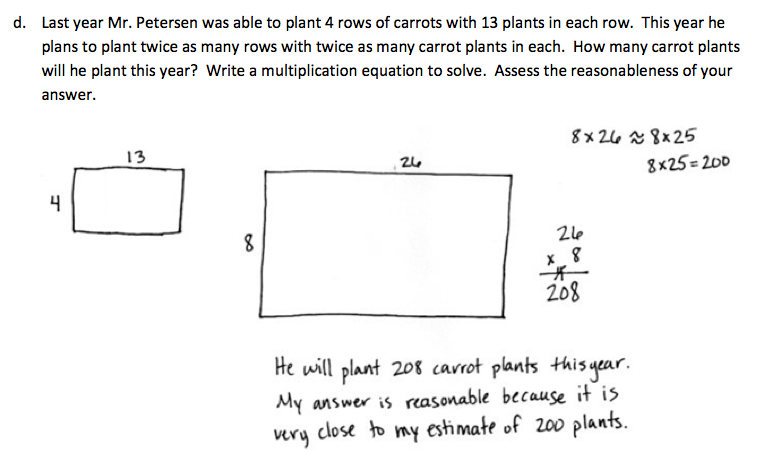
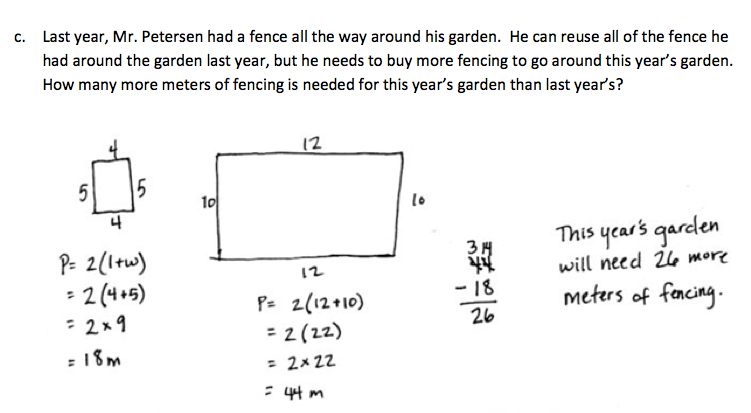
**Grade 4 Module 3 Mid-Module Assessment Task Key**



**Grade 4 Module 3 Mid-Module Assessment Task Key**



**Grade 4 Module 3 Mid-Module Assessment Task Key**



**Grade 4 Module 3 End-of-Module Assessment Score Sheet**

A Progression of Learning

A Progression of Learning is provided to describe steps that illuminate the gradually increasing understandings that students develop *on their way to proficiency.* In this chart, this progress is presented from left to right.  The learning goal for each student is to move to the last step, “Evidence of solid reasoning with a correct answer”.  These steps are meant to help teachers and students identify and celebrate what the student CAN do now, and what they need to work on next.

| Score Key: A Progression of Learning | | | |
| --- | --- | --- | --- |
| Little evidence of reasoning without a correct answer.  (0 Points) | Evidence of some reasoning without a correct answer.  (1 Point) | Evidence of some reasoning with a correct answer or evidence of solid reasoning with an incorrect answer.  (2 Points) | Evidence of solid reasoning with a correct answer.  (3 Points) |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Module 2: End-of-Module Assessment** | | | | | | | | | | | | | |
|  | **Domain** | | | | **Standards** | | | | | | | | | |
| Question | Operations and Algebraic Thinking | Number and Operations in Base Ten | | Measurement and Data | 4.OA.1 | 4.OA.2 | | 4.OA.3 | 4.OA.4 | | 4.NBT.5 | | 4.NBT.6 | 4.MD.3 |
| 1 | 0 1 2 3 |  | |  |  |  | |  | X | |  | |  |  |
| 2 | 0 1 2 3 |  | |  |  |  | |  | X | |  | |  |  |
| 3 | 0 1 2 3 | 0 1 2 3 | |  |  |  | | X |  | | X | | X |  |
| 4 |  | 0 1 2 3 | |  |  |  | |  |  | |  | | X |  |
| 5 |  | 0 1 2 3 | |  |  |  | |  |  | |  | | X |  |
| 6a |  |  | | 0 1 2 3 |  |  | |  |  | |  | |  | X |
| 6b, c, d | 0 1 2 3 | 0 1 2 3 | |  | X | X | | X |  | | X | | X |  |
|  | | |  | |  | |  | | |  | |
| Domain  Score | Operations and Algebraic Thinking | Number and Operations in Base-Ten | | Measurement and Data |  | | | | |
| Level |  |  | |  |
| Level 3 | 10-12 points | 10-12 points | | 3 points |
| Level 2 | 6-9 points | 6-9 points | | 2 points |
| Level 1 | 0-5 points | 0-5 points | | 0-1 points |

Note: For more information about standards assessed in this module, see back of this score sheet.

Notes:

**Grade 4 Module 3 End-of-Module Assessment Score Sheet (continued)**

|  |
| --- |
| End-of-Module Assessment Task (Topics A – H)  Clusters and Standards Addressed |
| Use the four operations with whole numbers to solve problems.  4.OA.1 Interpret a multiplication equation as a comparison, e.g., interpret 35 = 5 x 7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.  4.OA.2 Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.  4.OA.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.  Gain familiarity with factors and multiples.  4.OA.4 Find all factor pairs for a whole number in the range 1-100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1 – 100 is prime or composite.  Use place value understanding and properties of operations to perform multi-digit arithmetic.  4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.  4.NBT.6 Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.  Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.  4.MD.3 Apply the area and perimeter formulas for rectangles in real world and mathematical problems. *For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.* |

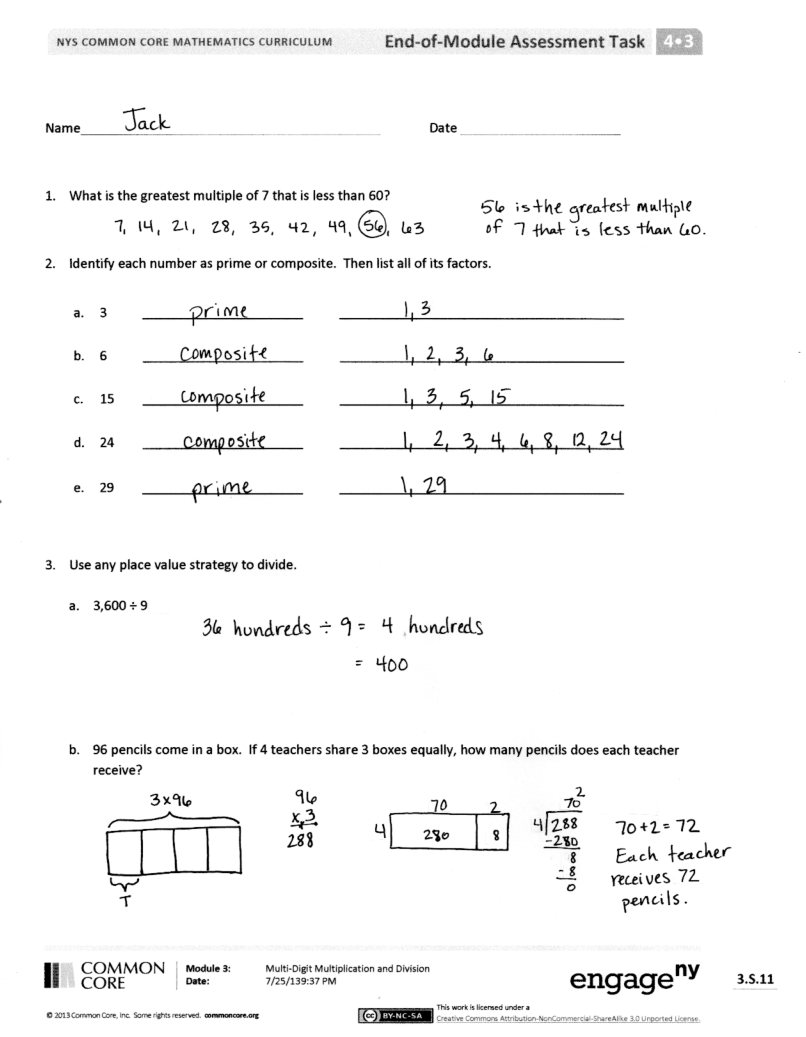
**Grade 4 Module 3 End-of-Module Assessment Rubric**

**\* Indicates items that have rubrics with changes/modifications from the original EngageNY rubric.**

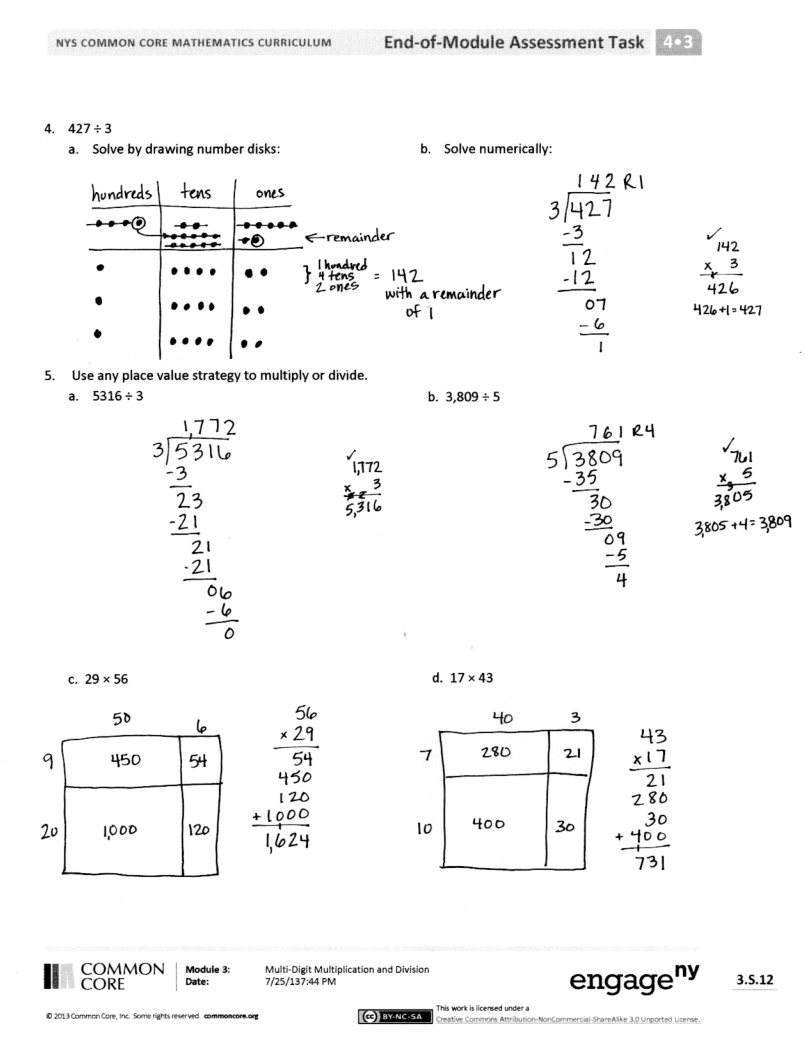
| A Progression of Learning | | | | |
| --- | --- | --- | --- | --- |
| Assessment  Task Item | STEP 0  Little evidence of reasoning without a correct answer.  (0 Points) | STEP 1  Evidence of some reasoning without a correct answer.  (1 Point) | STEP 2  Evidence of some reasoning with a correct answer or evidence of solid reasoning with an incorrect answer.  (2 Points) | STEP 3  Evidence of solid reasoning with a correct answer.  (3 Points) |
| **1**  4.OA.4 | The student answers incorrectly with a number that is not a multiple of 7. | The student answers incorrectly with a number that is a multiple of 7 but greater than 60. | The student answers with a multiple of 7 that is less than 60 but not 56. | The student correctly answers: The greatest multiple of 7 that is less than 60 is 56. |
| **2 \***  4.OA.4 | The student correctly answers **0** of the parts. | The student correctly answers **1-4** of the ten parts. | The student correctly answers **5-7** of the ten parts. | The student correctly answers **8-10** of the ten parts. (See below.) |
| **a. (1)** prime; **(2)** 1, 3  **b. (3)** composite; **(4)** 1, 2, 3, 6  **c. (5)** composite; **(6)** 1, 3, 5, 15  **d. (7)** composite; **(8)** 1, 2, 3, 4, 6, 8, 12, 24  **e. (9)** prime; **(10)** 1, 29 | | | |
| **3**  4.OA.3  4.NBT.5  4.NBT.6  Use this rubric to double score #3. Enter the same score in OA as in NBT. | The student incorrectly answers both parts and shows no reasoning. | The student correctly answers one part and shows little reasoning. | The student answers one part correctly but shows solid reasoning in both problems, or the student shows some reasoning with correct answers for both parts. | The student correctly answers using any place value strategy:   1. 400 2. Each teacher received 72 pencils. |
| **4**  4.NBT.6 | The student incorrectly represents division using number disks and incorrectly solves numerically. | The student incorrectly solves the numeric equation but shows some understanding of the place value chart and use of the algorithm. | The student decomposes incorrectly in one place value or does not interpret the remainder. | The student correctly decomposes and divides using the number disks and provides a numerical answer of 142 with a remainder of 1. |

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| --- | --- | --- | --- | --- |
| **Assessment  Task Item** | STEP 0  Little evidence of reasoning without a correct answer.  **(0 Points)** | STEP 1  Evidence of some reasoning without a correct answer.  **(1 Point)** | STEP 2  Evidence of some reasoning with a correct answer or evidence of solid reasoning with an incorrect answer.  **(2 Points)** | STEP 3  Evidence of solid reasoning with a correct answer.  **(3 Points)** |
| **5 \***  4.NBT.6 | The student correctly solves **0** parts. | The student correctly solves **1** part. | The student correctly solves **2** parts. | The student solves **3-4** of the four parts correctly. (See below.) |
| **a. (1)** 1,772 **b. (2)** 761 with a remainder of 4  **c. (3)** 1,624 **d. (4)** 731  Shows place value strategy. | | | |
| **6a \***  4.MD.3 | The student correctly answers **0** of the parts. (See below.) | The student correctly answers **1** of the parts. (See below.) | The student correctly answers **2** of the parts. (See below.) | The student correctly answers **3-4** of the parts. (See below.) |
| **(1)** solves using a model or equation.  **(2)** Shows work.  **(3)** Writes1,638 square meters of flooring (estimate 40 × 40 = 1,600 square m).  **(4)** It is a reasonable because the answer and estimate have a difference of only 38 square meters. | | | |
| **6 b, c, d \***  4.OA.1  4.OA.2  4.OA.3  4.NBT.5  4.NBT.6  **Use this rubric to double score #6 b, c, d. Enter the same score in OA as in NBT.** | The student correctly answers **0** of the parts. (See below) | The student correctly answers **1-3** of the parts. (See below) | The student correctly answers **4-5** of the parts. (See below) | The student correctly answers **6-7** of the parts. (See below) |
| b. **(1)** solves using model or equation  **(2)** shows work  **(3)** answers 528 more small posters than large posters.  c. **(4)** solves using model or equation  **(5)** shows work  **(6)** answers 48 packages.  d. **(7)** The possibilities are:  1 × 28 = 28  28 × 1 = 28  2 × 14 = 28  14 × 2 = 28  4 × 7 = 28  7 × 4 = 28 | | | |

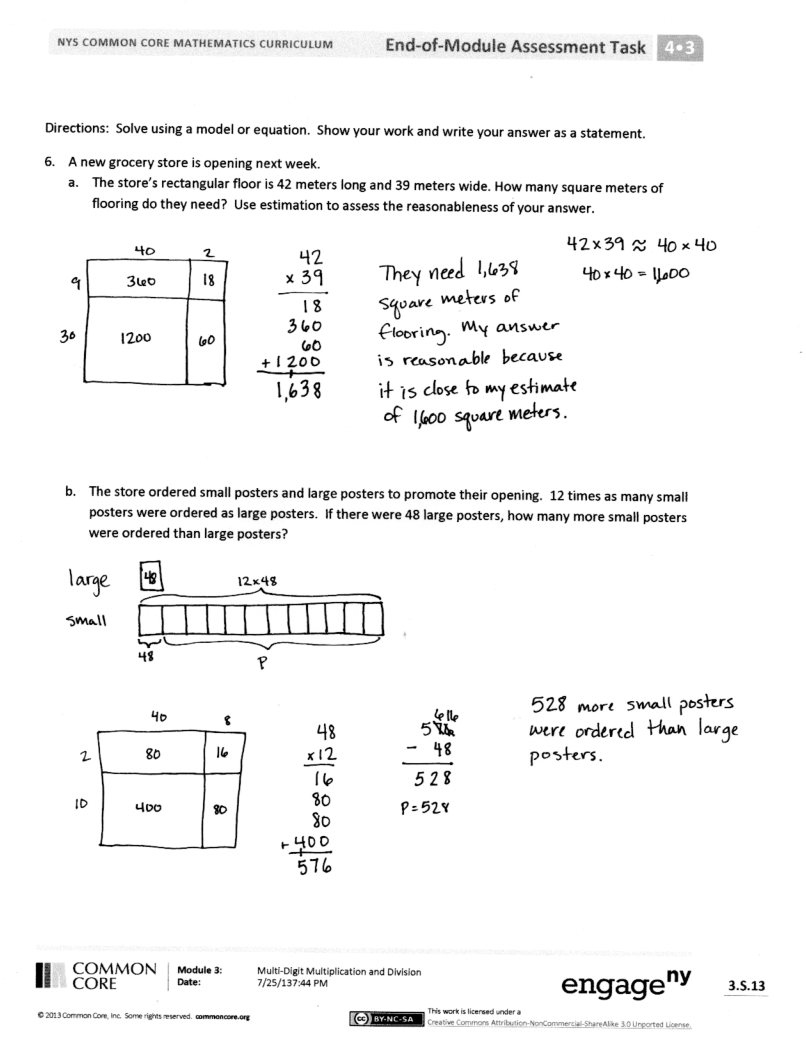
**Grade 4 Module 3 End-of-Module Assessment Key**



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